

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-5, 7, and 8 are currently pending, Claim 4 having been amended, Claim 6 having been canceled, and Claims 1-3, 5, 7, and 8 having been withdrawn from consideration. The changes and additions to the claims do not add new matter and are supported by the originally filed specification (see original Claim 6, and page 28, line 2 to page 31, line 11).

In the outstanding Office Action, the Specification was objected to; Claims 4 and 6 were rejected under 35 U.S.C. §112, second paragraph; Claims 4 and 6 were rejected under 35 U.S.C. §103(a) as unpatentable over Kuribayashi (U.S. Patent No. 6,434,091).

In view of the objection to the Specification, the title has been amended as suggested in the Office Action. No new matter has been added. Therefore, it is respectfully requested that this objection be withdrawn.

With respect to the rejection of Claim 4 under 35 U.S.C. §112, second paragraph, Claim 4 has been amended to more clearly describe and distinctly claim the subject matter regarded as the invention. No new matter has been added. Therefore, it is respectfully requested that this rejection be withdrawn.

With respect to the rejection of Claim 4 as unpatentable over Kuribayashi, Applicants respectfully submit that the amendment to Claim 4 overcomes this ground of rejection.

Claim 4 has been amended to recite,

An information recording medium comprising a guide groove along which information is recorded in an information recording region, the information being formed as a recorded mark in both of concave and convex portions of the guide groove, management information including address information being recorded by a wobble of the guide groove,

wherein the guide groove and wobble are formed so that a signal amplitude by the wobble of the guide groove reproduced by an information recording/reproducing device which irradiates the information recording medium with a light beam to play the information recording medium is 1.6% or more and 9% or less of a maximum amplitude of a signal produced at the time of when the light beam crosses the guide groove.

Support for these features can be found in the originally filed specification¹ and original Claim 6. No new matter has been added. Kuribayashi does not disclose or suggest at least these elements of amended Claim 4.

In a non-limiting embodiment of the invention defined by Claim 4, the optical disk (information recording medium) records data on both a land track and groove track (concave and convex portions of the guide groove).²

However, in Kuribayashi, the optical disk records data on only a groove track.³ In an optical disk which records information on only a groove track, the track width is fixed, and the reproduction signal receives relatively small influences from the wobble signal.

Therefore, Kuribayashi does not disclose or suggest an “information recording medium comprising a guide groove along which information is recorded in an information recording region, the information being formed as a recorded mark in both of concave and convex portions of the guide groove,” as recited by Claim 4.

As noted in the specification, as the track width fluctuates in the land track, an offset voltage corresponding to a wobble is superimposed on the reproduction signal (RF signal) as shown in Fig. 13, and it may become difficult to reproduce information.⁴ That is, reproduction of data recorded on a land track is more apt to influence of a wobble than in a

¹ See Specification, at p.28, line 2 to p. 31, line 11.

² See Specification, at p. 11, lines 20-27, and Fig. 4.

³ See Kuribayashi, at col. 6, lines 43-49

⁴ See Specification, at p. 13, line 21 to p. 15, line 3

case where data is recorded on a groove track. This is because there is no phase difference in the wobble of the walls on both sides of the groove track, and a phase difference exists in the wobble of the walls on both sides of the land track. As shown in Fig. 10, a wobble amplitude range in a disk is defined, which has a phase difference in the wobble of the walls on both sides of the data recording track.

In other words, as indicated by “r” of Fig. 25 and “m” of Fig. 22, if the standardized wobble signal amplitude is 1.6% or more and 9% or less, that is, if the signal amplitude by the wobble of the guide groove reproduced is 1.6% or more and 9% or less of a maximum amplitude of a signal produced at the time of when the light beam crosses the guide groove, the data recorded on the land track can be reproduced.

By clearly defining the wobble amplitude range as “1.6% or more and 9% or less of a maximum amplitude of a signal produced at the time of when the light beam crosses the guide groove,” as recited in Claim 4, it is possible to reproduce data recorded on land and groove tracks and to reproduce information recorded by wobble modulation.

Kuribayashi does not disclose or suggest that reproduction of the data recorded on the land track is more apt to influence of the wobble than in a case where a groove track is used. Kuribayashi does not even disclose or suggest that the wobble amplitude range is adequate in an optical disk which records information on only a groove track.

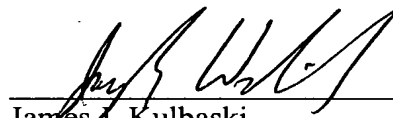
Therefore, Kuribayashi does not disclose or suggest that “the guide groove and wobble are formed so that a signal amplitude by the wobble of the guide groove reproduced by an information recording/reproducing device which irradiates the information recording medium with a light beam to play the information recording medium is 1.6% or more and 9% or less of a maximum amplitude of a signal produced at the time of when the light beam crosses the guide groove,” as recited by Claim 4.

Thus, it is respectfully submitted that amended Claim 4 patentably distinguishes over Kuribayashi.

Consequently, in light of the above discussion and in view of the present amendment, the outstanding grounds for rejection are believed to have been overcome. The present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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